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09/997,868

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	GORMAN ET AL.	Examiner:	UNKNOWN
Serial No.:	09/997,868	Group Art Unit:	1647
Filed:	NOVEMBER 28, 2001	Docket No.:	11669.103USW3
Title:	PROHORMONE CONVERTASE TRANSFORMED CELLS AND POLYPEPTIDE SYNTHESIS		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on February 28, 2002.

By: *Sheryl A. Boebboom*  
Name

PRELIMINARY AMENDMENT

Box Missing Parts  
Commissioner for Patents  
Washington, D.C. 20231



Dear Sir:

Please amend the above-referenced application for patent as follows.

In the Specification

Please replace the paragraph beginning at page 1, line 15, with the following rewritten paragraph:

--This is a continuation of application Serial No. 08/026,143, filed March 1, 1993, now issued as U.S. Patent No. 6,348,327, which is a continuation-in-part of International Application No. PCT/US92/10621, filed December 4, 1991, now abandoned, which is a continuation-in-part of application Serial No. 07/887,265, filed May 22, 1992, now abandoned, which is a continuation-in-part of application of Serial No. 07/803,631, filed December 6, 1991, now abandoned, which applications are incorporated herein by reference.--

Please delete the Sequence Listing at pages 109-148 and insert in its place the Substitute Sequence Listing submitted herewith.

### In the Claims

Please cancel claim 1 without prejudice. Please add and consider new claims 32-43.

32. (New) An animal host cell that is not naturally capable of forming secretory granules and that comprises a first nucleic acid encoding a prorelaxin polypeptide and a second nucleic acid encoding an enzyme that is capable of cleaving the prorelaxin polypeptide to form a mature two chain relaxin polypeptide.

33. (New) The host cell of claim 32 wherein the enzyme is a prohormone convertase 1 enzyme.

34. (New) The host cell of claim 32 wherein the enzyme is KEX2.

35. (New) A method of producing a mature two chain relaxin polypeptide comprising culturing the host cell of claim 32 under conditions where the first and second nucleic acids are expressed to produce the prorelaxin polypeptide and the enzyme; cleaving the prorelaxin polypeptide with the enzyme; and recovering mature two chain relaxin polypeptide.

36. (New) The method of claim 35 wherein the host cell is mammalian.

37. (New) The method of claim 36 wherein the host cell is a human embryonic kidney 293 cell.

38. (New) An animal host cell that is not naturally capable of forming secretory granules and that comprises a nucleic acid encoding a variant prorelaxin polypeptide, wherein the variant prorelaxin polypeptide comprises a non-naturally occurring cleavage site recognizable by an enzyme in the host cell that cleaves the variant prorelaxin at the non-naturally occurring cleavage site to form mature two chain relaxin in the host cell.

39. (New) The host cell of claim 38, wherein the enzyme is furin.

40. (New) The host cell of claim 35, wherein the enzyme is a prohormone convertase 2 enzyme.

41. (New) A method of producing a mature two chain relaxin polypeptide comprising culturing the host cell of claim 38 under conditions wherein the nucleic acid encoding the variant prorelaxin is expressed and cleaved at the non-naturally occurring cleavage site by the enzyme to form the mature two chain relaxin polypeptide; and recovering the relaxin polypeptide from the host cells.

42. (New) A method according to claim 41 wherein the enzyme is an endogenous enzyme.

43. (New) A method according to claim 41 wherein the enzyme is a heterologous enzyme.

### REMARKS

Applicants have amended the specification to update the information concerning related applications. Applicants also cancelled claim 1 without prejudice. Applicants reserve the right to pursue the subject matter of the claim in a continuation application. Applicants present new claims 32-43. Applicants submit the new claims are supported throughout the specification including at page 15, lines 19-35; page 37, lines 29-34; page 46, lines 1-18 and page 63, lines 23-25. Applicants submit the newly presented claims do not raise any issues of new matter.

Applicants submit herewith a substitute Sequence Listing and request that the Sequence Listing be replaced with the substitute Sequence Listing.

Applicants invite the Examiner to contact their representative, if necessary, to assist prosecution.

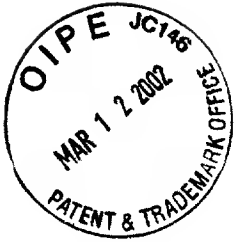
Respectfully submitted,

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Date:

February 28, 2002

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Serial No. 09/997,868

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification**

Paragraph beginning at page 1, line 15 has been amended as follows:

This [application] is a continuation of application Serial No. 08/026,143, filed March 1, 1993, now issued as U.S. Patent No. 6,348,327, [which application(s) are incorporated herein by reference,] which is a continuation-in-part of International Application No. PCT/US92/10621, filed December 4, 1991, now abandoned, which is a continuation-in-part of application Serial No. 07/887,265, filed May 22, 1992, [now pending] now abandoned, which is a continuation-in-part of application of Serial No. 07/803,631, filed December 6, 1991, now abandoned, which applications are incorporated herein by reference.

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